UNITED STATES PATENT AND TRADEMARK OFFICE

m∧

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,254	08/27/2001	Roland M. Hochmuth	10007641-1	6013

22879   7590   07/11/2007
HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER
PATEL, ASHOKKUMAR B

ART UNIT	PAPER NUMBER
2154	

MAIL DATE	DELIVERY MODE
07/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	09/941,254	HOCHMUTH ET AL.
	Examiner	**Art Unit**	
	Ashok B. Patel	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _24 April 2007_.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
  closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-20_ is/are pending in the application.

     4a) Of the above claim(s) _15-18_ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-14, 19 and 20_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
  application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   Paper No(s)/Mail Date. _____ .
3)☐ Information Disclosure Statement(s) (PTO/SB/08)   5)☐ Notice of Informal Patent Application
     Paper No(s)/Mail Date _____ .   6)☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-20 are subject to examination. Claims 15-18 are cancelled.

Response to Arguments

2.   Applicant's arguments filed 04/24/2007 have been fully considered but they are not persuasive for the following reasons:

Applicant's argument:

"The undersigned (again) notes the MPEP's admonition against piecemeal examination. Such piecemeal examination imposes an undue cost on applicants in the examination process. Simply stated, the approach taken by the Examiner is in direct contradiction to the established rules of the MPEP and policies of the U.S. PTO. "

Examiner's response:

a.   First Office action was mailed on 1/18/2005 by the office with the rejection of all claims.

b.   Second Office action was mailed on 09/28/2005 by the office with the rejection of all claims.

c.   Third office action was mailed on 02/16/2006 with the Examiner's response to the applicant's arguments in response to the second office action with the same rejection (rejection of all claims with the reference of the second office action.)

d.   Fourth office action was mailed on 08/07/2006 with Examiner's response to a declaration filed by the Applicant on May 15, 2006 under 37 CFR 1.131 <u>which was found to be effective.</u> Again a rejection was provided for all claims.

Applicant's arguments: Claim 1

"Simply stated, these elements do not disclose one of the two remotely-located

computers of claim 1."

"Significantly, Hendricks fails to teach or disclose "an input" of the camera 104,

the controller 134, or the video tape 106 (cited as constituting the claimed computer)

"for receiving a video signal output from a graphics card of a source computer," as

expressly recited in claim 1."

"In this regard, the claimed apparatus would correspond to the item 100 of FIG.

1, or item 200 of FIG. 4 of the present application. It is single device that comprises the

various elements defined in claim 1."

"Further still, claim 1 specifies that the compression circuit compresses the

plurality of "discrete units" which are stored in the memory. The cited compression

elements of Hendricks do not do this."

Examiner's response:

It should be noted that "**It is the claims that define the claimed invention,**

and it is claims, not specifications that are anticipated or unpatentable. *Constant*

v. Advanced Micro-Devices Inc., 7 USPQ2d 1064.

Also should be noted is that the "claims are to be given their broadest reasonable

interpretation during prosecution, and the scope of a claim cannot be narrowed by

reading disclosed limitations into the claim. See In re Morris, 127 F.3d 1048, 1054, 44

USPQ2D 1023, 1027 (Fed. Cir. 1997); In re Zletz, 893 F.2d 319, 321, 13 USPQ2D

1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404, 162 USPQ 541,550

(CCPA 1969). In addition, the law of anticipation does not require that a reference

"teach" what an appellant's disclosure teaches. Assuming that reference is properly

"prior art,'" it is only necessary that the claims "read on" something disclosed in the

reference, i.e., all limitations of the claim are found in the reference, or "fully met" by it.

Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781,789 (Fed. Cir.

1983).

As such, Examiner would like to present the teachings of Hendricks as follows

providing it's direct relevancy to claim limitations:

Claim 1:

Hendricks teaches at Figs. 9A and 9B the internal make-up of WEB SITE which

is element 140 of Figs. 3A and 3B.

This "WEB SITE" which is, as shown in Figs. 3A and 3B as element 140,

receives the videos, from various sources such as computer 134 over "DATA

COMMUNICATION NETWORK", element 120, and provides output "STREMING

VIDEO", element 116 to the user terminals which are shown in details of Fig. 8B.

elements 302, 304, 306, 308, and 310.

This "WEB SITE" which is, as shown in Figs. 3A and 3B as element 140, also

incorporates "DIGITAL STORAGE", element 132, as shown in Figs. 3A, 3B, 8B.

Hendricks defines the term "video" at col. 3, line 41-55, "In accordance with

the present invention, video is collected at a remote site. (The term "video", as used

herein, includes stereophonic or monophonic audio signals which may accompany a

video signal. Additionally, "video" is used broadly herein to include still images, groups

of related still images, animation, **graphics,** pictures, or other visual data.) The remote

video information may be obtained from a video cassette, CD ROMs, television

channels, one or more video cameras, or other well known sources. If video cameras

are used, they may be connected to a computer so that they are remotely controllable,

or they may be oriented such that a perception of control can be created for users. The

video may relate to remote sites of interest, such as a pyramid in Egypt, or the images

may relate to an educational lecture being conducted at a remote site."

Hendricks teaches at col. 6, line 65-col. 7, line 22, "As shown in FIG. 3A, a

computer 134 is connected to remote camera 104. The computer is able to control a

mechanical or electrical device on the camera 104, to alter the camera's orientation

(including position and/or angle). Audio and video from the camera 104 passes to the,

computer 134. The video may be processed and stored in the computer. Preferably, as

shown in FIG. 3B, the computer is connected to multiple remote cameras 104' and 104"

so that multiple users may each control a camera. The computer 134 may either

contain a compressor or be connected to an external compression unit 136. The video

from cameras 104' and 104" is compressed and provided to data communications

network 120. This compressed video is subsequently received by web site 140. The

remote cameras 104', 104" (FIG. 3B) may be controlled by control signals passed from

computer 134 on path 124. The control signals are received by computer 134 from the

data communications network 120 over the camera control path 126. The web site 140

provides the control information to the data communications network 120 over path 128.

The web site 140 of this example is adapted to pass control signals to cameras 104 and

to store video images in a digital storage means 132. The web site provides a number of streamed video outputs 116 as in the other examples."

Most importantly Hendricks teaches that the "WEB SITE" is implemented on the "SEVER 200" as shown in Figs 9A and 9B, and described at col. 12, line 19-31.

Thus, "WEB SITE" which is, as shown in Figs. 3A and 3B as element 140" is an "apparatus" for communicating graphics between at least two remotely-located computers (First: Fig. 3A elements 104,134,106; Second: Fig.10, elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310 or Fig. 8B. elements 302, 304, 306, 308, and 310.) across a computer network (Figs. 9A and 9B, element 242, 244, Note: "internet" or Fig. 8B, element 125, col. 11, line 1-4, "The web site 130 may store or process the received video, and make the video available to users at user terminals 302, 304, 306, 308, 310 by communicating the video over communication network 125.")

These factuality of Hendricks teach "An apparatus for communicating graphics between at least two remotely-located computers across a computer network."

Continuing and building on the teachings of Hendricks, Hendricks further teaches at col. 6, line 65-col. 7, line 22, "As shown in FIG. 3A, a computer 134 is connected to remote camera 104. The computer is able to control a mechanical or electrical device on the camera 104, to alter the camera's orientation (including position and/or angle). Audio and video from the camera 104 passes to the, computer 134. The video may be processed and stored in the computer. Preferably, as shown in FIG. 3B, the computer is connected to multiple remote cameras 104' and 104" so that multiple users may each

control a camera. The computer 134 may either contain a compressor or be connected to an external compression unit 136. The video from cameras 104' and 104" is compressed and provided to data communications network 120. This compressed video is subsequently received by web site 140. The remote cameras 104', 104" (FIG. 3B) may be controlled by control signals passed from computer 134 on path 124. The control signals are received by computer 134 from the data communications network 120 over the camera control path 126. The web site 140 provides the control information to the data communications network 120 over path 128. The web site 140 of this example is adapted to pass control signals to cameras 104 and to store video images in a digital storage means 132. The web site provides a number of streamed video outputs 116 as in the other examples."

Note: Thus. The source computer, element 134 of Figs. 3A and 3B, is anticipated to have graphic cards as they have video signal acquiring, processing and transmitting capabilities. Please also note that this inherency is consistent with the evidence provided in the specification related to Fig. 3A, element 134.

As previously indicated in Figs. 3A and 3B, elements 129, , which is "an input for receiving a video signal" on to the "server 200" from computer 134 over "DATA COMMUNICATION NETWORK", element 120.

These factuality of Hendricks teach "an input for receiving a video signal output from a graphics card of a source computer."

Hendricks further teaches at col. 6, line 38-41, "The web site 130 may store the audio and video received over data communication network 120 in digital storage unit

132 before providing it to the streamed outputs 116.", and line 46-57, "FIG. 3A shows

remote sites 102, cameras 104, computer 134, video path 122, 129, control path 124,

126, 128, compressors 108, 114, 118, 136 data communication network 120, web site

140, digital storage means 132, and streamed video 116. As with FIGS. 1 and 2,

remote sites 102 are filmed by camera 104. As with FIG. 1, the web site 140 is able to

receive video tape 106, compress the audio and video in compression unit 108, and

store the compressed audio and video 110. Audio and video from television stations

may also be compressed by compression unit 114 and stored or passed as streamed

video 116, as in FIG. 1."

Note: The video signal coming from various sources are being stored

individually.

These factuality of Hendricks teach "a memory for storing discrete units of

the video signal."

Hendricks depicts at Figs. 9A and 9B, elements 108, 114, 270, and teaches at

col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed

video signals from the receivers 220, 220' and the compressor units 108, 114. The

matrix switch 250 also receives compressed video data from database server 256.

Under control of the administrative unit 262, the digital matrix switch 250 outputs the

input compressed video signals to digital video servers 252, 252', 252", 252'". In this

manner, any input signal can be transferred to any video server as directed by the

admin unit. Also, stored programming from the database server 256 is routed to the

digital matrix switch 250 to be switched as if it were incoming live video. The outputs of

the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256.", col. 13, line 15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission."

Note: Thus, compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission from "WEB SITE" as desired.

These factuality of Hendricks teach "a compression circuit for compressing a plurality of the discrete units into a compressed video signal."

Hendricks teaches at Figs. 9A and 9B, elements 108, 114, 270, and at col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit 262, the digital matrix switch 250 outputs the input compressed video signals to digital video servers 252, 252', 252", 252"'. In this manner,

any input signal can be transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256."

Also Hendricks teaches at col. 13, line 15-27; "In a preferred embodiment, the matrix switch 270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission."

Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission from "WEB SITE" as desired.

Hendricks teaches at col. 12, line 32-45 "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown,

the receivers may have more than one video output. Audio and video signals may also

be input to the web server 200 by videocassette (or other suitable recorded media) or

simply by feeding in television programming. As with FIGS. 1 and 3, these signals are

preferably compressed by compression units 108, 114. On the opposite side, the web

server 200 is connected to remote users by a router 230 and communication equipment

240, which in turn are connected to the internet 242 or directly connected 244 to users.

The communications equipment 240 outputs the video streams 116 through a number

of input/output ports",

Note: Input is video signal, output is sent over internet, that is formatted for "IP"

transmission.

These factuality of Hendricks teach "a network interface circuit coupled to

both the compression circuit and the computer network, the network interface

circuit configured to format and communicate the compressed video signal over

the computer network to a remote computer."

And Hendricks teaches "an output (Figs. 9A and 9B, element 240) coupled

to the computer network (Figs. 9A and 9B, element 242, 244)."

Applicant's argument: Claim 2

"The features emphasized in claim 2 above closely parallel the distinguishing

features discussed above in connection with claim 1. Therefore, Applicants submit that

the rejection of claim 2 should be withdrawn for at least the same reasons set forth

above in connection with claim 1."

Examiner's response:

Please refer to the explanation provided for claim 1 above.

Applicant's argument: Claim 19

"The Office Action cited the same features of Hendricks to the claimed operation

of "receiving a video signal from a graphics card of a source computer," as it did to the

"input for receiving ..." element of claim 1.

Examiner's response:

Please refer to the explanation provided for claim 1 above.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless-

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1-5, 7-12, 19 and 20 are rejected under 35 U.S.C. 102(e) as being

anticipated by Hendricks et al. (hereinafter Hendricks) (US 6, 675, 386 B1).

Referring to claim 1,

Hendricks teaches an apparatus (Figs. 9A and 9B, element 140) for

communicating graphics (col. 3, line 41-55, "In accordance with the present invention,

video is collected at a remote site. (The term "video", as used herein, includes

stereophonic or monophonic audio signals which may accompany a video signal.

Additionally, "video" is used broadly herein to include still images, groups of related still

images, animation, graphics, pictures, or other visual data.) The remote video information may be obtained from a video cassette, CD ROMs, television channels, one or more video cameras, or other well known sources. If video cameras are used, they may be connected to a computer so that they are remotely controllable, or they may be oriented such that a perception of control can be created for users. The video may relate to remote sites of interest, such as a pyramid in Egypt, or the images may relate to an educational lecture being conducted at a remote site.") between at least two remotely-located computers (First: Fig. 3A elements 104,134,106; Second: Fig.10, elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310) across a computer network (Figs. 9A and 9B, element 242, 244, Note: "internet") comprising:

an input for receiving a video signal (Fig. 3A, elements 129, 106, "THE DISCOVERY CHANNEL", The LEARNING CHANNEL") output from a graphics card of a source computer (Fig. 3A, element 104, 134, 106, col. 6, line 64-col. 7, line 12, "FIGS. 3A and 3B add the additional feature of camera control to the previously described embodiments. As shown in FIG. 3A, a computer 134 is connected to remote camera 104. The computer is able to control a mechanical or electrical device on the camera 104, to alter the camera's orientation (including position and/or angle). Audio and video from the camera 104 passes to the, computer 134. The video may be processed and stored in the computer. Preferably, as shown in FIG. 3B, the computer is connected to multiple remote cameras 104' and 104" so that multiple users may each control a camera. The computer 134 may either contain a compressor or be connected to an external compression unit 136. The video from cameras 104' and 104" is compressed

and provided to data communications network 120. This compressed video is subsequently received by web site 140. The remote cameras 104', 104" (FIG. 3B) may be controlled by control signals passed from computer 134 on path 124. The control signals are received by computer 134 from the data communications network 120 over the camera control path 126. The web site 140 provides the control information to the data communications network 120 over path 128. The web site 140 of this example is adapted to pass control signals to cameras 104 and to store video images in a digital storage means 132. The web site provides a number of streamed video outputs 116 as in the other examples." **Note:** Source computers, such as element 104, 134 and 106 are anticipated to have graphic cards as they have video signal acquiring and transmitting capabilities. Please also note that this inherency is consistent with the evidence provided in the specification related to Fig. 1, element 20.);

a memory for storing discrete units of the video signal (Fig. 3B, element 132, Figs. 9A and 9B, element 258, 260, col. 6, line 38-41, "The web site 130 may store the audio and video received over data communication network 120 in digital storage unit 132 before providing it to the streamed outputs 116.", and line 46-57, "FIG. 3A shows remote sites 102, cameras 104, computer 134, video path 122, 129, control path 124, 126, 128, compressors 108, 114, 118, 136 data communication network 120, web site 140, digital storage means 132, and streamed video 116. As with FIGS. 1 and 2, remote sites 102 are filmed by camera 104. As with FIG. 1, the web site 140 is able to receive video tape 106, compress the audio and video in compression unit 108, and store the compressed audio and video 110. Audio and video from television stations

may also be compressed by compression unit 114 and stored or passed as streamed

video 116, as in FIG. 1.", Note: The video signal coming from various sources are being

stored individually.);

a compression circuit for compressing a plurality of the discrete units into a

compressed video signal (Figs. 9A and 9B, elements 108, 114, <u>270</u>, col. 12, line 54-67,

"The digital matrix switch 250 receives all incoming compressed video signals from the

receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also

receives compressed video data from database server 256. Under control of the

administrative unit 262, the digital matrix switch 250 outputs the input compressed video

signals to digital video servers 252, 252', 252", 252"'. In this manner, any input signal

can be transferred to any video server as directed by the admin unit. Also, stored

programming from the database server 256 is routed to the digital matrix switch 250 to

be switched as if it were incoming live video. The outputs of the digital matrix switch

250 also connect to the database server 256, so that anything at the inputs, such as

incoming live audio and video, can be stored in the database server 256.", col. 13, line

15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor

which joins different frames of video and audio such that each output contains frames

for multiple video pictures (including audio). This enables users to receive split screen

images of video and select an audio track for playback (see FIG. 14, discussed below).

The split-screen images may be formed by using known methods, which may differ

depending on the type of compression used. For example, digital images may be

decompressed, combined with other decompressed images, and then re-compressed;

or the images may be decompressed and converted to analog, combined, and then

converted to digital and compressed for transmission." Note: Compression occurs at

two different places, first, before storing the discrete units of video signals and, second,

before making the signals ready for transmission as desired.);

a network interface circuit coupled to both the compression circuit (Figs. 9A and

9B, elements 108, 114, 270, col. 12, line 54-67, "The digital matrix switch 250 receives

all incoming compressed video signals from the receivers 220, 220' and the compressor

units 108, 114. The matrix switch 250 also receives compressed video data from

database server 256. Under control of the administrative unit 262, the digital matrix

switch 250 outputs the input compressed video signals to digital video servers 252,

252', 252", 252'". In this manner, any input signal can be transferred to any video

server as directed by the admin unit. Also, stored programming from the database

server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming

live video. The outputs of the digital matrix switch 250 also connect to the database

server 256, so that anything at the inputs, such as incoming live audio and video, can

be stored in the database server 256.", col. 13, line 15-27, "In a preferred embodiment,

the matrix switch 270 may contain a processor which joins different frames of video and

audio such that each output contains frames for multiple video pictures (including

audio). This enables users to receive split screen images of video and select an audio

track for playback (see FIG. 14, discussed below). The split-screen images may be

formed by using known methods, which may differ depending on the type of

compression used. For example, digital images may be decompressed, combined with

other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired.) and the computer network (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports"), the network interface circuit configured to format (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On

the opposite side, the web server 200 is connected to remote users by a router 230 and

communication equipment 240, which in turn are connected to the internet 242 or

directly connected 244 to users. The communications equipment 240 outputs the video

streams 116 through a number of input/output ports", Note: Input is video signal, output

is sent over internet, that is formatted for "IP" transmission.), and communicate the

compressed video signal over the computer network to a remote computer (Fig.10,

elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310, col. 12, line 54-67, "The

digital matrix switch 250 receives all incoming compressed video signals from the

receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also

receives compressed video data from database server 256. Under control of the

administrative unit 262, the digital matrix switch 250 outputs the input compressed video

signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal

can be transferred to any video server as directed by the admin unit. Also, stored

programming from the database server 256 is routed to the digital matrix switch 250 to

be switched as if it were incoming live video. The outputs of the digital matrix switch

250 also connect to the database server 256, so that anything at the inputs, such as

incoming live audio and video, can be stored in the database server 256."); and

an output (Figs. 9A and 9B, element 240) coupled to the computer network (Figs.

9A and 9B, element 242, 244).

Referring to claim 2,

Hendricks teaches an apparatus (Figs. 9A and 9B, element 140) for

communicating graphics (Fig. 3A, elements 129, 106, "THE DISCOVERY CHANNEL",

The LEARNING CHANNEL", (col. 3, line 41-55, "In accordance with the present invention, video is collected at a remote site. (The term "video", as used herein, includes stereophonic or monophonic audio signals which may accompany a video signal. Additionally, "video" is used broadly herein to include still images, groups of related still images, animation, graphics, pictures, or other visual data.) The remote video information may be obtained from a video cassette, CD ROMs, television channels, one or more video cameras, or other well known sources. If video cameras are used, they may be connected to a computer so that they are remotely controllable, or they may be oriented such that a perception of control can be created for users. The video may relate to remote sites of interest, such as a pyramid in Egypt, or the images may relate to an educational lecture being conducted at a remote site.") across a computer network (Fig. 3A elements 104,134,106; Fig.10, elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310, Figs. 9A and 9B, element 242, 244, Note: "internet") comprising:

an input for receiving a video signal (Fig. 3A, elements 129, 106, "THE DISCOVERY CHANNEL", The LEARNING CHANNEL", Fig. 3A, element 104, 134, 106, col. 6, line 64-col. 7, line 12, "FIGS. 3A and 3B add the additional feature of camera control to the previously described embodiments. As shown in FIG. 3A, a computer 134 is connected to remote camera 104. The computer is able to control a mechanical or electrical device on the camera 104, to alter the camera's orientation (including position and/or angle). Audio and video from the camera 104 passes to the, computer 134. The video may be processed and stored in the computer. Preferably, as shown in FIG. 3B,

the computer is connected to multiple remote cameras 104' and 104" so that multiple

users may each control a camera. The computer 134 may either contain a compressor

or be connected to an external compression unit 136. The video from cameras 104' and

104" is compressed and provided to data communications network 120. This

compressed video is subsequently received by web site 140. The remote cameras

104', 104" (FIG. 3B) may be controlled by control signals passed from computer 134 on

path 124. The control signals are received by computer 134 from the data

communications network 120 over the camera control path 126. The web site 140

provides the control information to the data communications network 120 over path 128.

The web site 140 of this example is adapted to pass control signals to cameras 104 and

to store video images in a digital storage means 132. The web site provides a number

of streamed video outputs 116 as in the other examples.".);

a memory for storing discrete units of the video signal (Fig. 3B, element 132,

Figs. 9A and 9B, element 258, 260, col. 6, line 38-41, "The web site 130 may store the

audio and video received over data communication network 120 in digital storage unit

132 before providing it to the streamed outputs 116.", and line 46-57, "FIG. 3A shows

remote sites 102, cameras 104, computer 134, video path 122, 129, control path 124,

126, 128, compressors 108, 114, 118, 136 data communication network 120, web site

140, digital storage means 132, and streamed video 116. As with FIGS. 1 and 2,

remote sites 102 are filmed by camera 104. As with FIG. 1, the web site 140 is able to

receive video tape 106, compress the audio and video in compression unit 108, and

store the compressed audio and video 110. Audio and video from television stations

may also be compressed by compression unit 114 and stored or passed as streamed

video 116, as in FIG. 1.", Note: The video signal coming from various sources are being

stored individually.);

a compression circuit for compressing a plurality of the discrete units into a

compressed video signal (Figs. 9A and 9B, elements 108, 114, 270, col. 12, line 54-67,

"The digital matrix switch 250 receives all incoming compressed video signals from the

receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also

receives compressed video data from database server 256. Under control of the

administrative unit 262, the digital matrix switch 250 outputs the input compressed video

signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal

can be transferred to any video server as directed by the admin unit. Also, stored

programming from the database server 256 is routed to the digital matrix switch 250 to

be switched as if it were incoming live video. The outputs of the digital matrix switch

250 also connect to the database server 256, so that anything at the inputs, such as

incoming live audio and video, can be stored in the database server 256.", col. 13, line

15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor

which joins different frames of video and audio such that each output contains frames

for multiple video pictures (including audio). This enables users to receive split screen

images of video and select an audio track for playback (see FIG. 14, discussed below).

The split-screen images may be formed by using known methods, which may differ

depending on the type of compression used. For example, digital images may be

decompressed, combined with other decompressed images, and then re-compressed;

or the images may be decompressed and converted to analog, combined, and then

converted to digital and compressed for transmission." Compression occurs at two

different places, first, before storing the discrete units of video signals and, second,

before making the signals ready for transmission as desired.);

a network interface circuit coupled to both the compression circuit (Figs. 9A and

9B, elements 108, 114, 270, col. 12, line 54-67, "The digital matrix switch 250 receives

all incoming compressed video signals from the receivers 220, 220' and the compressor

units 108, 114. The matrix switch 250 also receives compressed video data from

database server 256. Under control of the administrative unit 262, the digital matrix

switch 250 outputs the input compressed video signals to digital video servers 252,

252', 252", 252'". In this manner, any input signal can be transferred to any video

server as directed by the admin unit. Also, stored programming from the database

server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming

live video. The outputs of the digital matrix switch 250 also connect to the database

server 256, so that anything at the inputs, such as incoming live audio and video, can

be stored in the database server 256.", col. 13, line 15-27, "In a preferred embodiment,

the matrix switch 270 may contain a processor which joins different frames of video and

audio such that each output contains frames for multiple video pictures (including

audio). This enables users to receive split screen images of video and select an audio

track for playback (see FIG. 14, discussed below). The split-screen images may be

formed by using known methods, which may differ depending on the type of

compression used. For example, digital images may be decompressed, combined with

other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired.) and the computer network (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports"), the network interface circuit configured to format (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On

the opposite side, the web server 200 is connected to remote users by a router 230 and

communication equipment 240, which in turn are connected to the internet 242 or

directly connected 244 to users. The communications equipment 240 outputs the video

streams 116 through a number of input/output ports", Note: Input is video signal, output

is sent over internet, that is formatted for "IP" transmission.), and communicate the

compressed video signal over the computer network to a remote computer (Fig.10,

elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310, col. 12, line 54-67, "The

digital matrix switch 250 receives all incoming compressed video signals from the

receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also

receives compressed video data from database server 256. Under control of the

administrative unit 262, the digital matrix switch 250 outputs the input compressed video

signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal

can be transferred to any video server as directed by the admin unit. Also, stored

programming from the database server 256 is routed to the digital matrix switch 250 to

be switched as if it were incoming live video. The outputs of the digital matrix switch

250 also connect to the database server 256, so that anything at the inputs, such as

incoming live audio and video, can be stored in the database server 256.");

Referring to claim 3,

Hendricks teaches the apparatus of claim 2, wherein the video signal is in

compliance with a Digital Visual Interface (DVI) standard.(col. 3, line 41-55, "In

accordance with the present invention, video is collected at a remote site. (The term

"video", as used herein, includes stereophonic or monophonic audio signals which may

accompany a video signal. Additionally, "video" is used broadly herein to include still images, groups of related still images, animation, graphics, pictures, or other visual data.) The remote video information may be obtained from a video cassette, <u>CD ROMs,</u> television channels, one or more video cameras, or other well known sources. If video cameras are used, they may be connected to a computer so that they are remotely controllable, or they may be oriented such that a perception of control can be created for users. The video may relate to remote sites of interest, such as a pyramid in Egypt, or the images may relate to an educational lecture being conducted at a remote site.")

Referring to claim 4

Hendricks teaches the apparatus of claim 2, wherein the video signal is an analog video signal. (col. 3, line 41-55, "In accordance with the present invention, video is collected at a remote site. (The term "video", as used herein, includes stereophonic or monophonic audio signals which may accompany a video signal. Additionally, "video" is used broadly herein to include still images, groups of related still images, animation, graphics, pictures, or other visual data.) The remote video information may be obtained from a video cassette, CD ROMs, <u>television channels</u>, one or more video cameras, or other well known sources. If video cameras are used, they may be connected to a computer so that they are remotely controllable, or they may be oriented such that a perception of control can be created for users. The video may relate to remote sites of interest, such as a pyramid in Egypt, or the images may relate to an educational lecture being conducted at a remote site.")

Referring to claim 5,

Hendricks teaches the apparatus of claim 2, further comprising a circuit for converting an analog video signal into a digital video signal. (col. 13, line 15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be decompressed and <u>converted to analog, combined, and then converted to digital and compressed for transmission.</u>", additionally also col. 15, line 28-34)

Referring to claim 7,

Hendricks teaches the apparatus of claim 2, wherein the computer network comprises a wide area network (WAN). (Figs. 9A and 9B, elements 242, "Internet"))

Referring to claim 8,

Hendricks teaches the apparatus of claim 2, wherein the network interface circuit is configured to format the compressed video signal into a plurality of Internet Protocol (IP) packets that are communicated over the computer network to the remote computer. (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also

be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports"), the network interface circuit configured to format (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports", and Figs. 9A and 9B, elements 108, 114, 270, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed video signals from the receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also receives compressed video data from database server 256. Under control of the administrative unit 262, the digital matrix switch 250 outputs the input compressed video

signals to digital video servers 252, 252', 252", 252'". In this manner, any input signal can be transferred to any video server as directed by the admin unit. Also, stored programming from the database server 256 is routed to the digital matrix switch 250 to be switched as if it were incoming live video. The outputs of the digital matrix switch 250 also connect to the database server 256, so that anything at the inputs, such as incoming live audio and video, can be stored in the database server 256.", col. 13, line 15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor which joins different frames of video and audio such that each output contains frames for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired. Input is video signal, output is sent over internet, that is formatted for "IP" transmission.),

Referring to claim 9,

Hendricks teaches the apparatus of claim 2, further comprising a second input for receiving a second video signal. (Figs. 3A and 3B, elements 104s, 122s, 106 and 114)

Referring to claim 10,

Hendricks teaches the apparatus of claim 9, wherein the compression circuit is further configured to separately compress a plurality of discrete units for each of the video signals.(Figs. 3A and 3B, elements 118, 136, 108, 114 and Figs. 9A and 9B, elements 108, 114, col. 13, line 15-27, as explained above in claim 1 and 2)

Referring to claim 11,

Hendricks teaches the apparatus of claim 2, wherein the network interface circuit is configured to format and communicate separately compressed video signals to different remote computers, such that a first remote computer receives a first compressed video signal and a second remote computer receives a second compressed video signal. (Fig. 10, elements 302 (a first remote computer receives a first compressed video signal), element 304 (a second remote computer receives a second compressed video signal), col. 15, line 46- col. 16, line 6, "(68) FIG. 10 shows how the users are connected to the web site, and shows an example of a communications network 125 (FIG. 8B) in detail. The connections shown in FIG. 10 apply to the web sites of the previous figures, including the web site 112 (FIG. 1), 130 (FIG. 2) and 140 (FIGS. 3 and 9). FIG. 10 shows a server platform 200, the internet 242, two direct connection 244, two traditional internet hosts 272, 274, two cable internet hosts 276, 278, a satellite-based internet host 280, a telephone dialup 282, an ISDN channel 284, a cable plant 286, 288, a satellite system 290 and a plurality of connected user terminals 302, 304, 306, 308, 310. In operation, the web site 112, 130, 140 may communicate over the internet 242 to a number of different systems. These

systems include a traditional internet host 272, 274 and a cable headend internet host

276. The traditional internet host 272, 274 may be connected via a telephone line 282

or an ISDN channel 284 to a plurality of remote user terminals 302, 304, respectively.

The cable internet host 276 may be connected via a cable plant 286 to a remote user

306. Alternatively, the web site is connected via a direct connection 244 to a cable

headend internet host 278 or satellite-based internet host 280. The cable headend

internet host 278 communicates to a cable plant 288 and a remote user terminal 308.

The satellite-based internet host 280 communicates via a satellite 290 to a user terminal

310. These direct connections 244 enable a higher data rate and use a high speed

cable modem. It is advantageous that the communications equipment 240 (FIG. 9)

enables communications with any type of user terminal no matter what the data rate or

system. Of course, user terminals with higher data rates will receive higher quality

audio and video images.")

Referring to claim 12,

The apparatus of claim 2, further comprising a plurality of network interface

circuits (Fig. 10, element "WORLD WATCH LIVE WEB SITE" ELEMENTS 112, 130,

140), each network interface circuit being coupled to both a compression circuit (col. 15,

line 46-51, "FIG. 10 shows how the users are connected to the web site, and shows an

example of a communications network 125 (FIG. 8B) in detail. The connections shown

in FIG. 10 apply to the web sites of the previous figures, including the web site 112

(FIG. 1), 130 (FIG. 2) and 140 (FIGS. 3 and 9)." Note: Please also note that Figs. 9A

and 9B also have element 140 incorporating element 200.)and the computer network,

each network interface circuit being configured to format and communicate the compressed video signal over the computer network to a remote computer (col. 15, line 51-57, FIG. 10 shows a server platform 200, the internet 242, two direct connection 244, two traditional internet hosts 272, 274, two cable internet hosts 276, 278, a satellite-based internet host 280, a telephone dialup 282, an ISDN channel 284, a cable plant 286, 288, a satellite system 290 and a plurality of connected user terminals 302, 304, 306, 308, 310. ")

Referring to claim 19,

Hendricks teaches a method (Figs. 9A and 9B, element 140) for communicating graphics (Fig. 3A, elements 129, 106, "THE DISCOVERY CHANNEL", The LEARNING CHANNEL", (col. 3, line 41-55, "In accordance with the present invention, video is collected at a remote site. (The term "video", as used herein, includes stereophonic or monophonic audio signals which may accompany a video signal. Additionally, "video" is used broadly herein to include still images, groups of related still images, animation, graphics, pictures, or other visual data.) The remote video information may be obtained from a video cassette, CD ROMs, television channels, one or more video cameras, or other well known sources. If video cameras are used, they may be connected to a computer so that they are remotely controllable, or they may be oriented such that a perception of control can be created for users. The video may relate to remote sites of interest, such as a pyramid in Egypt, or the images may relate to an educational lecture being conducted at a remote site.") across a computer network (Fig. 3A elements

104,134,106; Fig.10, elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310, Figs.

9A and 9B, element 242, 244, Note: "internet") comprising:

receiving a video signal (Fig. 3A, elements 129, 106, "THE DISCOVERY

CHANNEL", The LEARNING CHANNEL") from a graphics card of a source computer

(Fig. 3A, element 104, 134, 106, col. 6, line 64-col. 7, line 12, "FIGS. 3A and 3B add the

additional feature of camera control to the previously described embodiments. As

shown in FIG. 3A, a computer 134 is connected to remote camera 104. The computer

is able to control a mechanical or electrical device on the camera 104, to alter the

camera's orientation (including position and/or angle). Audio and video from the camera

104 passes to the, computer 134. The video may be processed and stored in the

computer. Preferably, as shown in FIG. 3B, the computer is connected to multiple

remote cameras 104' and 104" so that multiple users may each control a camera. The

computer 134 may either contain a compressor or be connected to an external

compression unit 136. The video from cameras 104' and 104" is compressed and

provided to data communications network 120. This compressed video is subsequently

received by web site 140. The remote cameras 104', 104" (FIG. 3B) may be controlled

by control signals passed from computer 134 on path 124. The control signals are

received by computer 134 from the data communications network 120 over the camera

control path 126. The web site 140 provides the control information to the data

communications network 120 over path 128. The web site 140 of this example is

adapted to pass control signals to cameras 104 and to store video images in a digital

storage means 132. The web site provides a number of streamed video outputs 116 as

in the other examples." Note: Source computers, such as element 104, 134 and 106 are

anticipated to have graphic cards as they have video signal acquiring and transmitting

capabilities. Please also note that this inherency is consistent with the evidence

provided in the specification related to Fig. 1, element 20.););

converting the video signal into a format (Figs. 9A and 9B, elements 108, 114,

270, col. 12, line 54-67, "The digital matrix switch 250 receives all incoming compressed

video signals from the receivers 220, 220' and the compressor units 108, 114. The

matrix switch 250 also receives compressed video data from database server 256.

Under control of the administrative unit 262, the digital matrix switch 250 outputs the

input compressed video signals to digital video servers 252, 252', 252", 252"'. In this

manner, any input signal can be transferred to any video server as directed by the

admin unit. Also, stored programming from the database server 256 is routed to the

digital matrix switch 250 to be switched as if it were incoming live video. The outputs of

the digital matrix switch 250 also connect to the database server 256, so that anything

at the inputs, such as incoming live audio and video, can be stored in the database

server 256.", col. 13, line 15-27, "In a preferred embodiment, the matrix switch 270 may

contain a processor which joins different frames of video and audio such that each

output contains frames for multiple video pictures (including audio). This enables users

to receive split screen images of video and select an audio track for playback (see FIG.

14, discussed below). The split-screen images may be formed by using known

methods, which may differ depending on the type of compression used. For example,

digital images may be decompressed, combined with other decompressed images, and

then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired. , Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports"), suitable for communication over a computer network (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200

is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports", Note: Input is video signal, output is sent over internet, that is formatted for "IP" transmission.); and communicating the converted video signal across the computer network to a remote computer. (Fig.10, elements 272, 274, 276, 278, 280, 302, 304, 306, 308, 310)

Referring to claim 20,

Hendricks teaches the method of claim 19, wherein the step of converting comprises forming a plurality of Internet Protocol (IP) packets collectively embodying the video signal. (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication network 120 by transmission equipment 210 and receive equipment 220. As shown, multiple receivers 220, 220' may be used. Also, as shown, the receivers may have more than one video output. Audio and video signals may also be input to the web server 200 by videocassette (or other suitable recorded media) or simply by feeding in television programming. As with FIGS. 1 and 3, these signals are preferably compressed by compression units 108, 114. On the opposite side, the web server 200 is connected to remote users by a router 230 and communication equipment 240, which in turn are connected to the internet 242 or directly connected 244 to users. The communications equipment 240 outputs the video streams 116 through a number of input/output ports"), the network interface circuit configured to format (Figs. 9A and 9B, element 242, 244, "The web site 140 is connected to the data communication

network 120 by transmission equipment 210 and receive equipment 220. As shown,

multiple receivers 220, 220' may be used. Also, as shown, the receivers may have

more than one video output. Audio and video signals may also be input to the web

server 200 by videocassette (or other suitable recorded media) or simply by feeding in

television programming. As with FIGS. 1 and 3, these signals are preferably

compressed by compression units 108, 114. On the opposite side, the web server 200

is connected to remote users by a router 230 and communication equipment 240, which

in turn are connected to the internet 242 or directly connected 244 to users. The

communications equipment 240 outputs the video streams 116 through a number of

input/output ports", and Figs. 9A and 9B, elements 108, 114, 270, col. 12, line 54-67,

"The digital matrix switch 250 receives all incoming compressed video signals from the

receivers 220, 220' and the compressor units 108, 114. The matrix switch 250 also

receives compressed video data from database server 256. Under control of the

administrative unit 262, the digital matrix switch 250 outputs the input compressed video

signals to digital video servers 252, 252', 252", 252"'. In this manner, any input signal

can be transferred to any video server as directed by the admin unit. Also, stored

programming from the database server 256 is routed to the digital matrix switch 250 to

be switched as if it were incoming live video. The outputs of the digital matrix switch

250 also connect to the database server 256, so that anything at the inputs, such as

incoming live audio and video, can be stored in the database server 256.", col. 13, line

15-27, "In a preferred embodiment, the matrix switch 270 may contain a processor

which joins different frames of video and audio such that each output contains frames

for multiple video pictures (including audio). This enables users to receive split screen images of video and select an audio track for playback (see FIG. 14, discussed below). The split-screen images may be formed by using known methods, which may differ depending on the type of compression used. For example, digital images may be decompressed, combined with other decompressed images, and then re-compressed; or the images may be decompressed and converted to analog, combined, and then converted to digital and compressed for transmission." Note: Compression occurs at two different places, first, before storing the discrete units of video signals and, second, before making the signals ready for transmission as desired. Input is video signal, output is sent over internet, that is formatted for "IP" transmission.).

Claim Rejections - 35 USC §103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or' described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the ad to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (hereinafter Hendricks) (US 6, 675, 386 B1) in view of Mou (US 7, 068, 596 B1)

Referring to claim 6,

Keeping in mind the teachings of Hendricks in claim 2 as stated above, Hendricks fails to teach the apparatus of claim 2, wherein the computer network comprises a local area network (LAN).

Mou teaches at Col. 5, line 48-64, "When a file is transmitted from the central

server 112 to a client via the local server 102, the transmission and interactive control of

the transmitted data may be performed in a manner to enable real-time streaming and

therefore instantaneous access to the data by a requesting client. Alternatively, there

may be a small or considerable delay, depending upon the transmission medium that is

used. For instance, the transmission medium used to transmit data from the central

server 112 to the local server 102, and from the local server 102 to each device 108

may include a traditional transmission medium such as a cable modem connection. In a

WAN setting, bandwidth cannot be guaranteed at a sustainable rate to support real-time

broad-band video streaming. Thus, it is important to note that the benefit of the local

server 102 in a LAN setting is to provide sustainable bandwidth to guarantee

uninterrupted real-time video streaming (wherein the computer network comprises a

local area network (LAN))".

Therefore it would have been an obvious to one of an ordinary skill in art, having

the teachings of Hendricks and Mou in front of him at the time of invention was made,

to implement the function and arrangement, of transmitting the video signals to a local

server such as 102 of Mou because, as taught by Mou, the benefit of a the local server

102 in a LAN setting is to provide sustainable bandwidth to guarantee uninterrupted

real-time video streaming.

7.   Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Hendricks et al. (hereinafter Hendricks) (US 6, 675, 386 B1) in view of Boe (US

2002/0109975 A1)

Referring to claims 13 and 14,

Keeping in mind the teachings of Hendricks as stated in claim 2 above, Hendricks teaches a source computer that supplies the video signal (Figs. 3A and 3B, element 134), however Hendricks fails to teach the apparatus of claim 2, wherein the apparatus comprises a connector for direct connection, wherein the connector comprises signals carrying power signals for powering the apparatus, and the apparatus of claim 13, wherein the connector is an edge connector configured to directly plug into a card slot of a motherboard.

Boe teaches two important concepts , for one at para. [0003], "A typical arrangement for a computer system is to have a backplane circuit board, such as a motherboard, that serves as a platform on which the computer system may be built. The **motherboard** typically has a number of **sockets or slots** into which other circuit boards with components may be plugged to form **electrical** and **mechanical** connections between the circuit boards and the motherboard. Examples of circuit boards with components that may be plugged into the motherboard include one or more central processing units, main memory cards, **video adapter cards,** video acceleration cards, sound cards, SCSI controller cards, parallel or serial interface cards, game adapter cards, network cards, and others. Circuit boards with components such as these may plug into a motherboard through connectors along one edge of the circuit board. The edge connectors plug directly into a slot or socket(the connector is an edge connector configured to directly plug into a card slot of a motherboard.). When attached in this manner, the circuit board may be substantially perpendicular to

the motherboard." Also, at para. [0033], "A power supply 5 is electrically connected to the second circuit board 2 through a power cable 6 as illustrated in FIG. 4. In other embodiments, power could be supplied through traces in a circuit board connected to a power supply rather than through a power cable.", and as indicated in Fig. 4 and para.[0029} second circuit board is motherboard and First (base) circuit board is upright board plugged into the mother board through edge connector supplying power through traces as indicated in para.[0033]. (connector comprises signals carrying power signals for powering the apparatus, apparatus being the first (base) circuit board is upright board plugged into the mother board).

Therefore it would have been an obvious to one of an ordinary skill in art, having the teachings of Hendricks and Boe in front of him at the time of invention was made, to implement the function and arrangement, as taught by Boe, of video adapter card receiving the power signal and video from the motherboard as the video adapter card having the edge connector directly plugged into the motherboard (the connector is an edge connector configured to directly plug into a card slot of a motherboard and connector comprises signals carrying power signals for powering the apparatus) as Hendricks has the personal computer as a source of video signal (Figs. 3 A and 3B, element 134) and a server (Figs. 9A and 9B, element 200) as follows: Boe's teachings makes suggestion and teaches the function and arrangement to one of an ordinary skill in art, to combine the personal computer as a source of video signal (Figs. 3 A and 3B, element 134 with integral compression circuit) into the Hendricks server (Figs. 9A and 9B, element 200) by adding the arrangement and functionality of Personal computer

into the server such that the video from different sources as shown by Hendricks can be

received directly into the web server rather than receiving through the network 120.

This would been obvious because it creates the device providing the flexibility (which

can be used as a server or personal computer) that can be used practically anywhere,

such as on local area network or on wide area network, in conjunction with various

sources of video signal providing devices.

Conclusion

Examiner's note: Examiner has cited particular columns and line numbers in the

references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are

applied to the specific limitations within the individual claim, other passages and figures

may apply as well. It is respectfully requested from the applicant in preparing responses,

to fully consider the references in entirety as potentially teaching all or part of the

claimed invention, as well as the context of the passage as taught by the prior art or

disclosed by the Examiner.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-

3972. The examiner can normally be reached on 6:30 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nathan A. Flynn can be reached on (571) 272-1915. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AP